

**PROGRAM:** Financial Services

**PROGRAM:**  
**CIP CODE:** 52.0800

**DESCRIPTION:** *The **Financial Services** program is designed to prepare students for employment in general banking and financial services support positions requiring customer service skills, basic business skills and technical skills applicable to the methods and operations of financial service institutions. The instruction is designed, planned and delivered as a coherent sequence utilizing a delivery system which includes formal technical instruction, experiential learning, supervised cooperative work experience and the Career and Technical Student Organizations, Future Business Leaders of America (FBLA) or Distributive Education Clubs of America (DECA). Students completing this program will possess advanced critical thinking, career development, applied academic, life management, business, economic and leadership skills required for employees in Financial Service occupations.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Technological Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** *The following course is recommended as part of a Comprehensive CTE FINANCIAL SERVICES Program:*

99.0400.10 **Business Management Technology:** Students should complete this Level II cluster or attain these competencies.

99.0500.10 **Human Services Technology:** If Business Management Technology is not available, students may complete this Level II cluster or attain these competencies.

## Financial Services (continued)

Level III  
Grades  
11 –12

*The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III FINANCIAL SERVICES competencies are addressed in this instructional sequence.*

52.0800.10 **Banking and Related Financial Services:** This course prepares students to perform financial or banking services, including: processing insurance claims, receiving and paying out money, credit collection and processing loans. Instruction in business technologies, customer service and public relations are part of this course.

*One of the following Level III courses will be included as part of the instructional sequence for this program:*

52.0800.20 **Financial Services Technology:** The outcomes of this course are integrated into learning experiences allowing students to demonstrate the full range of Financial Services competencies through projects/simulations.

52.0800.80 **Financial Services – Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Financial Services** program.

### **CERTIFICATION ABBREVIATIONS FOR THE FINANCIAL SERVICES PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVF Provisional Vocational Family Consumer Sciences*
- *PVH Provisional Vocational Health Occupations*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVF Standard Vocational Family Consumer Sciences*
- *SVH Standard Vocational Health Occupations*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VFC Vocational Family & Consumer Sciences*
- *VHE Vocational Home Economics*
- *VHO Vocational Health Occupations*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VRO Vocational Related Occupations*

### CERTIFICATE REQUIREMENTS FOR THE FINANCIAL SERVICES PROGRAM

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Human Services Technology</b>	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	Type AVT, BVT, PVT, SVT Approval VHO	Type PVH, SVH			

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Financial Services</b>	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB					
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **52.0800.80**.

Diversified Cooperative Education course **Financial Services, 52.0800.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.

**PROGRAM:** Fire Science

**PROGRAM  
CIP CODE:** 43.0200

**DESCRIPTION:** *The **Fire Science** program is designed to prepare students for employment in various occupations related to fire prevention and fire fighting. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for employment in Fire Science occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** ***The following course is recommended as part of a Comprehensive Career and Technical Education (CTE) Program:***

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** ***The following courses are recommended as part of a Comprehensive CTE FIRE SCIENCE Program:***

90.0200.10 **Industrial Technology:** Students should complete this Level II cluster or attain these competencies.

99.0500.10 **Human Services Technology:** Students may complete this Level II cluster or attain these competencies. This is recommended for students who wish to obtain skills in communications, human relations, and resource management.

## Fire Science (continued)

99.0300.20 ***Applied Biological Systems-Agriculture:*** Students may complete this Level II cluster or attain these competencies.

### Level III Grades 11-12

***The following describes the recommended sequence of courses developed from industry-validated skills necessary for entry-level employment or continued related education. All the Level III FIRE SCIENCE competencies are addressed in this instructional sequence.***

43.0200.10 ***Fire Science Fundamentals:*** This course is designed to develop technical skills and knowledge associated with the use and maintenance of tools and equipment in fire fighting. Students will also develop an awareness of emergency medical first aid procedures and hazardous materials handling.

***One of the following Level III courses will be included as part of the instructional sequence for this program:***

43.0200.20 ***Fire Science Advanced Applications:*** This course prepares students for advanced technical skills and knowledge using a variety of firefighting technology techniques and equipment. Students will also develop an awareness of emergency medical handling.

43.0200.80 ***Fire Science – Cooperative Education:*** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the ***Fire Science*** program.

### **CERTIFICATION ABBREVIATIONS FOR THE FIRE SCIENCE PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVA Provisional Vocational Agriculture*
- *PVF Provisional Vocational Family Consumer Sciences*
- *PVH Provisional Vocational Health Occupations*
- *PVI Provisional Vocational Industrial Technology*
- *PVT Provisional Vocational Education Teacher*
- *SVA Standard Vocational Agriculture*
- *SVF Standard Vocational Family Consumer Sciences*
- *SVH Standard Vocational Health Occupations*
- *SVI Standard Vocational Industrial Technology*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VAG Vocational Agriculture*
- *VFC Vocational Family & Consumer Sciences*
- *VHE Vocational Home Economics*
- *VHO Vocational Health Occupations*
- *VIT Vocational Industrial and Technical Education*
- *VRO Vocational Related Occupations*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

### CERTIFICATE REQUIREMENTS FOR THE FIRE SCIENCE PROGRAM

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type PVI, SVI				
<b>Applied Biological Systems</b>	Type AVT, BVT, PVT, SVT Approval VAG	Type PVA, SVA	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	Type AVT, BVT, PVT, SVT Approval VHO	Type PVH, SVH	
<b>Human Services Technology</b>	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	Type AVT, BVT, PVT, SVT Approval VHO	Type PVH, SVH			

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Fire Science</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **43.0200.80**.

Diversified Cooperative Education course **Fire Science, 43.0200.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.



**PROGRAM:** Food Production/Culinary Arts

**PROGRAM**

**CIP CODE:** 12.0500

**DESCRIPTION:** *The **Food Production/Culinary Arts** Program is designed to prepare students to apply technical knowledge and skills required for food production and service occupations in institutional and commercial food establishments. Students completing this program will possess the technical knowledge and skills required for planning, selecting, storing, purchasing, preparing and serving quality food products. Nutritive values, safety/sanitation precautions, use of commercial equipment, serving techniques, special diets and management of food establishments will also be studied. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for entry into Food Production/Culinary Arts occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization FCCLA or SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I**  
**Grades**  
**7-8** *The following course is recommended as part of a Comprehensive Career and Technological Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II**  
**Grades**  
**9-10** *The following courses are recommended as part of a Comprehensive CTE FOOD PRODUCTION/CULINARY ARTS Program:*

99.0300.40 **Applied Biological Systems – Food Science:** Students should complete this Level II cluster or attain these competencies.

## Food Production/Culinary Arts (continued)

99.0500.10 **Human Services Technology:** Students may complete this Level II cluster or attain these competencies. This is recommended for students who have a special interest in improving human interaction skills.

99.0400.10 **Business Management Technology:** Students may complete this Level II cluster or attain these competencies. This is recommended for students who have an interest in proprietorships, management, and supervisory occupations.

### Level III Grades 11-12

***The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III FOOD PRODUCTION/CULINARY ARTS competencies are addressed in this instructional sequence.***

12.0500.10 **Food Production/Culinary Arts Principles:** This course prepares students to serve under the supervision of food service professionals as kitchen support staff and commercial food preparation workers. It includes instruction in kitchen equipment, organization and operations, sanitation and quality control, quantity food preparation and cooking skills. It provides an opportunity to begin the two year ProStart skills certification.

***One of the following Level III courses will be included as part of the instructional sequence for this program:***

12.0500.20 **Food Production/Culinary Arts Applications:** This course prepares students with advanced applications in kitchen equipment, organization and operations, sanitation and quality control, quantity food preparation and cooking skills. It provides an opportunity to complete a ProStart skills certificate.

12.0500.80 **Food Production/Culinary Arts – Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Food Production/Culinary Arts** program.

### **CERTIFICATION ABBREVIATIONS FOR THE FOOD PRODUCTION / CULINARY ARTS PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *PVA Provisional Vocational Agriculture*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVF Provisional Vocational Family Consumer Sciences*
- *PVH Provisional Vocational Health Occupations*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVA Standard Vocational Agriculture*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVF Standard Vocational Family Consumer Sciences*
- *SVH Standard Vocational Health Occupations*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VAG Vocational Agriculture*
- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VFC Vocational Family & Consumer Sciences*
- *VHE Vocational Home Economics*
- *VHO Vocational Health Occupations*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VRO Vocational Related Occupations*
- *VTT Vocational Trade and Technical Education*

**CERTIFICATE REQUIREMENTS FOR THE FOOD PRODUCTION / CULINARY ARTS PROGRAM**

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Applied Biological Systems</b>	Type AVT, BVT, PVT, SVT Approval VAG	Type PVA, SVA	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	Type AVT, BVT, PVT, SVT Approval VHO	Type PVH, SVH	
<b>Human Services Technology</b>	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	Type AVT, BVT, PVT, SVT Approval VHO	Type PVH, SVH			
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Food Production Culinary Arts</b>	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	Type PVI, SVI Approval VTT, VIT				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **12.0500.80**.

Diversified Cooperative Education course **Food Production Culinary Arts, 12.0500.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.

**PROGRAM:**           **Graphic Communication**

**PROGRAM  
CIP CODE:**       **48.0200**

**DESCRIPTION:**   *The **Graphic Communication** program is designed to prepare students to apply technical knowledge and skills to plan, prepare, and execute commercial and industrial visual image and print products. Students will learn to use mechanical, electronic, and digital graphic and printing equipment as identified through Printing Industry Association of America PrintEd standards. In addition to technical skills, students completing this program will also develop advanced critical thinking, career development, applied academic, life management, business, economic and leadership skills required for Graphic Communication occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7- 8**                   ***The following course is recommended as part of a Comprehensive Career and Technical Education (CTE) Program:***

90.0000.10   ***Technological Foundations:*** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10**                   ***The following courses are recommended as part of a Comprehensive CTE GRAPHIC COMMUNICATION Program:***

99.0100.10   ***Information Technology:*** Students should complete this Level II cluster or attain these competencies. This is recommended for students who wish to emphasize computer systems in such areas as desktop publishing, printing and graphics occupations.

99.0200.10   ***Industrial Technology:*** Students may complete this Level II cluster or attain these competencies.

## Graphic Communication (continued)

Level III  
Grades  
11-12

*The following describes a recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III GRAPHIC COMMUNICATION competencies are addressed in this instructional sequence.*

48.0200.10 **Graphic Communication Fundamentals:** This course prepares students to apply technical knowledge and skills to plan, prepare and execute commercial and industrial visual image and print products using mechanical, electronic, and digital graphic and printing equipment.

*One of the following Level III courses will be included as part of the instructional sequence for this program:*

48.0200.20 **Graphic Communication Advanced Applications:** This course prepares students for advanced technical knowledge and skills using a variety of graphic communications techniques and equipment.

48.0200.80 **Graphic Communication – Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Graphic Communication** program.

### **CERTIFICATION ABBREVIATIONS FOR THE GRAPHIC COMMUNICATION PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

**CERTIFICATE REQUIREMENTS FOR THE GRAPHIC COMMUNICATION PROGRAM**

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Graphic Communication</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **48.0200.80**.

Diversified Cooperative Education course **Graphic Communication, 48.0200.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.



**PROGRAM:** Heating, Ventilation, Air Conditioning/Refrigeration (HVAC/R)

**PROGRAM**

**CIP CODE:** 47.0200

**DESCRIPTION:** *The **Heating, Ventilation, Air Conditioning/Refrigeration (HVAC/R)** program is designed to prepare students for employment installing, repairing, and maintaining the operating condition of heating, air conditioning, and refrigeration systems in residential and light commercial applications. It includes instruction in the scientific principles of heat transfer, pneumatics, hydraulics, control systems, installation from blueprints, and environmental regulations regarding coolants. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for Heating, Ventilation, Air Conditioning/Refrigeration (HVAC/R) occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** *The following courses are recommended as part of a Comprehensive CTE HEATING, VENTILATION, AIR CONDITIONING/REFRIGERATION (HVAC/R) Program:*

99.0200.10 **Industrial Technology:** Students should complete this Level II cluster or attain these competencies.

99.0400.10 **Business Management Technology:** Students may complete this Level II cluster or attain these competencies.

99.0100.10 **Information Technology:** Students may complete this Level II cluster or attain these competencies.

## Heating, Ventilation, Air Conditioning/Refrigeration (continued)

Level III  
Grades  
11-12

*The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III HEATING, VENTILATION, AIR CONDITIONING/REFRIGERATION (HVAC/R) competencies are addressed in this instructional sequence.*

- 47.0200.10 **Heating, Ventilation, Air Conditioning/Refrigeration (HVAC/R) Fundamentals:** This course prepares students to apply basic technical knowledge and skills to repair, install, service and maintain the operating condition of heating, air conditioning, and refrigeration systems. Instruction includes diagnostic techniques, the use of testing equipment, the principles of mechanics, electricity, and electronics as they relate to the repair of heating, air conditioning and refrigeration systems.

***One of the following Level III courses will be included as part of the instructional sequence for this program:***

- 47.0200.20 **Heating, Ventilation, Air Conditioning/Refrigeration (HVAC/R) Advanced Applications:** This course prepares students for advanced technical knowledge and skills pertaining to the application of the principles of: mechanics; electricity/electronics; fuels as they relate to HVAC/R.
- 47.0200.80 **Heating, Ventilation, Air Conditioning/Refrigeration (HVAC/R) – Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Heating, Ventilation, Air Conditioning/Refrigeration (HVAC/R)** program.

**CERTIFICATION ABBREVIATIONS FOR THE HEATING, VENTILATION, AIR CONDITIONING REFRIGERATION PROGRAM**

**CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

**APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

**CERTIFICATE REQUIREMENTS FOR THE HEATING, VENTILATION, AIR CONDITIONING REFRIGERATION PROGRAM**

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT  Approval VTI	Type AVT, BVT, PVT, SVT  Approval VTT	Type AVT, BVT, PVT, SVT  Approval VTI	Type PVI, SVI				
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT  Approval VDE	Type AVT, BVT, SVT, PVT  Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT  Approval VOE	Type AVT, BVT, PVT, SVT  Approval VBS	Type PVB, SVB		
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT  Approval VOE	Type AVT, BVT, PVT, SVT  Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT  Approval VTT	Type AVT, BVT, PVT, SVT  Approval VIT	Type AVT, BVT, PVT, SVT  Approval VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Heating, Ventilation, Air Conditioning, Refrigeration</b>	Type IA	Type AVT, BVT, PVT, SVT  Approval VTI	Type AVT, BVT, PVT, SVT  Approval VTT	Type AVT, BVT, PVT, SVT  Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **47.0200.80**.

Diversified Cooperative Education course **Heating, Ventilation, Air Conditioning Refrigeration, 47.0200.80** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.

**PROGRAM:** Heavy Equipment Operation

**PROGRAM**

**CIP CODE:** 49.0200

**DESCRIPTION:** *The **Heavy Equipment Operation** program is designed to prepare students for employment operating a variety of heavy equipment, such as a crawler tractor, paving machine, trench digging machine, conveyor, bulldozer, dredge, pump, compressor, pneumatic tool, motor grader, scraper, power shovel, dragline and crane. It also contains information relating to current technology in construction equipment operating systems. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for entry into Construction Equipment Operation occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** *The following courses are recommended as part of a Comprehensive CTE HEAVY EQUIPMENT OPERATION Program:*

99.0200.10 **Industrial Technology:** Students should complete this Level II cluster or attain these competencies.

99.0400.10 **Business Management Technology:** Students may complete this Level II cluster or attain these competencies.

## Heavy Equipment Operation (continued)

Level III  
11-12

*The following describes a recommended sequence of courses Grades developed from industry-validated skills necessary for entry-level employment or continued related education. All the Level III HEAVY EQUIPMENT OPERATION competencies, including the Employability Skills, are addressed in this instructional sequence.*

49.0200.10 **Heavy Equipment Operation Fundamentals:** This course prepares students to apply technical knowledge and skills to operate a variety of heavy equipment, such as a crawler tractors, motor graders and scrapers, and shovels, including dragline, hoe, and cranes. It includes instruction in digging, ditching, sloping, stripping, grading, backfilling, clearing and excavating.

*One of the following Level III courses will be included as part of the instructional sequence for this program:*

49.0200.20 **Heavy Equipment Operation Advanced Applications:** This course prepares students for advanced technical knowledge and skills using a variety of construction equipment operation techniques and equipment.

49.0200.80 **Heavy Equipment Operation–Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Heavy Equipment Operation** program.

### **CERTIFICATION ABBREVIATIONS FOR THE HEAVY EQUIPMENT OPERATION PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

**CERTIFICATE REQUIREMENTS FOR THE HEAVY EQUIPMENT OPERATION PROGRAM**

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Heavy Equipment Operation</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **49.0200.80**.

Diversified Cooperative Education course **Heavy Equipment Operation, 49.0200.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.



**PROGRAM:** Hospitality Services

**PROGRAM  
CIP CODE:** 08.0900

**DESCRIPTION:** *The **Hospitality Services** program is designed to prepare students for employment in positions that provide customer-focused services in such facilities as hotels, meeting centers, hospitals, education facilities, shopping malls, recreation parks, and office buildings. A student completing this program will possess the knowledge and skills associated with reservations and front desk operations, meeting and banquet room support services, food beverage support services, housekeeping, laundry operations, supervisory functions, and environmental functions. In addition to these skills, students will possess advanced employability skills including critical and conceptual thinking, communications, applied academics, life management, and technology. This program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organizations, FCCLA or DECA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** *The following courses are recommended as part of a Comprehensive CTE HOSPITALITY SERVICES Program:*

99.0400.10 **Business Management Technology:** Students should complete this Level II cluster or attain these competencies.

99.0500.10 **Human Services Technology:** Students may complete this Level II cluster or attain these competencies.

99.0300.40 **Applied Biological Systems – Food Science:** Is recommended for students who are interested in furthering their understanding of scientific principles related to foods.

## Hospitality Services (continued)

Level III  
Grades  
11-12

*The following describes a recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III HOSPITALITY SERVICES competencies are addressed in this instructional sequence.*

08.0900.10 ***Principles of Hospitality Services:*** This course prepares students for occupations in a variety of hospitality services and facilities including hotels, resorts, meeting centers, hospitals, education facilities, shopping malls, recreation parks, and office buildings.

***One of the following Level III courses will be included as a part of the instructional sequence for this program:***

08.0900.20 ***Hospitality Services Applications:*** The outcomes of this course are integrated into learning projects and simulations to demonstrate the full range of Hospitality services competencies.

08.0900.80 ***Hospitality Services - Cooperative Education:*** This course utilizes a cooperative education methodology to combine school based or supervised work based learning experiences directly related to the competencies identified for the ***Hospitality Services*** program.

### **CERTIFICATION ABBREVIATIONS FOR THE HOSPITALITY SERVICES PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVF Provisional Vocational Family Consumer Sciences*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVF Standard Vocational Family Consumer Sciences*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VAG Vocational Agriculture*
- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VFC Vocational Family & Consumer Sciences*
- *VHE Vocational Home Economics*
- *VHO Vocational Health Occupations*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VRO Vocational Related Occupations*

### CERTIFICATE REQUIREMENTS FOR THE HOSPITALITY SERVICES PROGRAM

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Human Services Technology</b>	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	Type AVT, BVT, PVT, SVT Approval VHO	Type PVH, SVH			
<b>Applied Biological Systems</b>	Type AVT, BVT, PVT, SVT Approval VAG	Type PVA, SVA	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	Type AVT, BVT, PVT, SVT Approval VHO	Type PVH, SVH	

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Hospitality Services</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **08.0900.80**.

Diversified Cooperative Education course **Hospitality Services, 08.0900.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.

**PROGRAM:** Law Enforcement

**PROGRAM  
CIP CODE:** 43.0100

**DESCRIPTION:** *The **Law Enforcement** program is designed to prepare students for employment in various public and private security and patrol occupations. Students completing this program will develop the technical knowledge and skills associated with policing, civil/criminal investigations, and corrections professions. In addition to the required technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for employment in Law Enforcement occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** *The following courses are recommended as part of a Comprehensive CTE LAW ENFORCEMENT Program:*

99.0500.10 **Human Services Technology:** Students should complete this Level II cluster or attain these competencies.

99.0100.10 **Information Technology:** If Human Services Technology is not available, students may also complete this Level II cluster or attain these competencies.

## Law Enforcement (continued)

- 99.0400.10 **Business Management Technology:** If Human services Technology is not available, students may also complete this Level II cluster or attain these competencies.

### Level III Grades 11-12

***The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III LAW ENFORCEMENT competencies are addressed in this instructional sequence.***

- 43.0100.10 **Policing Principles and Practices:** This course provides knowledge of policing principles and practices, with special emphasis on public relations, communications technology, investigation specialties, patrol and security procedures, crisis procedures, legal issues, theory of crime, probation, and delinquency, and physical survival skills.

***One of the following Level III courses will be included as part of the instructional sequence for this program:***

- 43.0100.20 **Law Enforcement Advanced Applications:** This course prepares students for advanced knowledge and skills using a variety of techniques and methods.
- 43.0100.80 **Law Enforcement - Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Law Enforcement** program.

### **CERTIFICATION ABBREVIATIONS FOR THE LAW ENFORCEMENT PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVF Provisional Vocational Family Consumer Sciences*
- *PVH Provisional Vocational Health Occupations*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVF Standard Vocational Family Consumer Sciences*
- *SVH Standard Vocational Health Occupations*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VFC Vocational Family & Consumer Sciences*
- *VHE Vocational Home Economics*
- *VHO Vocational Health Occupations*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VRO Vocational Related Occupations*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

### CERTIFICATE REQUIREMENTS FOR THE LAW ENFORCEMENT PROGRAM

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Human Services Technology</b>	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	Type AVT, BVT, PVT, SVT Approval VHO	Type PVH, SVH			
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Law Enforcement</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **43.0100.80**.

Diversified Cooperative Education course **Law Enforcement, 43.0100.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.



**PROGRAM:**           **Masonry**

**PROGRAM**

**CIP CODE:**       **46.0100**

**DESCRIPTION:**   *The **Masonry** program is designed to prepare students to lay building materials such as brick, concrete block, pavers, and to construction or repair walls, and other structures. Fundamentals of masonry include the information and basic skills necessary to build from blueprints residential, commercial, and industrial structures. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for Masonry occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I**               *The following course is recommended as part of a*  
**Grades**           **Comprehensive Career and Technical Education (CTE)**  
**7-8**               **Program:**

90.0000.10   **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II**           *The following course are recommended as part of a*  
**Grades**           **Comprehensive CTE MASONRY Program:**  
**9-10**

99.0200.10   **Industrial Technology:** Students should complete this Level II cluster or attain these competencies.

99.0400.10   **Business Management Technology:** Students may complete this Level II cluster or attain these competencies. This is recommended for students who wish to emphasize the entrepreneurial aspects of this industry.

## Masonry (continued)

Level III  
Grades  
11-12

*The following describes the recommended sequence of courses developed from industry-validated skills necessary for entry level employment or continued related education. All the Level III MASONRY competencies are addressed in this instructional sequence.*

46.0100.10 **Masonry Fundamentals:** This course prepares students to apply technical knowledge and skills in the laying and/or setting of brick, concrete block, and related materials, using trowels, levels, hammers, chisels, masonry saws, and other power and hand tools.

*One of the following Level III courses will be included as part of the instructional sequence for this program:*

46.0100.20 **Masonry Advanced Applications:** This course prepares students for advanced technical knowledge and skills using a variety of masonry techniques and equipment.

46.0100.80 **Masonry - Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Masonry** program.

### **CERTIFICATION ABBREVIATIONS FOR THE MASONRY PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

### CERTIFICATE REQUIREMENTS FOR THE MASONRY PROGRAM

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Masonry</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **46.010080**.

Diversified Cooperative Education course **Masonry, 46.0100.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.

**PROGRAM:**           **Media Communication**

**PROGRAM  
CIP CODE:**       **10.0100**

**DESCRIPTION:**   *The **Media Communication** program is designed to prepare students for employment in various audio development, production, installation, and delivery occupations. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for Media Communication occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8**                   ***The following course is recommended as part of a Comprehensive Career and Technical Technological Education (CTE) Program:***

90.0000.10   ***Technological Foundations:*** All students **should** complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10**                   ***The following courses are recommended as part of a Comprehensive CTE MEDIA COMMUNICATION Program:***

99.0100.10   ***Information Technology:*** Students **should** complete this Level II cluster or attain these competencies.

99.0200.10   ***Industrial Technology:*** Students **may** complete this Level II cluster or attain these competencies. This is recommended for students who have a special interest in equipment maintenance and installation.

99.0400.10   ***Business Management Technology:*** Students **may** complete this Level II cluster or attain these competencies. This is recommended for students who have a special interest in business ownership, sales, promotion, and advertising.

## Media Communication (continued)

Level III  
Grades  
11-12

*The following describes the recommended sequence of courses developed from industry-validated skills necessary for entry level employment or continued related education. All the Level III MEDIA COMMUNICATION competencies are addressed in this instructional sequence.*

10.0100.10 **Media Communication Fundamentals:** Students will gain experience in the development, production, and delivery of information, with an emphasis on integrated systems. Competencies will include aesthetics, the principles and elements of design, as well as basic installation, operation, and maintenance of audio and video equipment.

*One of the following Level III courses will be included as part of the instructional sequence for this program:*

10.0100.20 **Media Communication Advanced Applications:** This course prepares students for advanced technical knowledge and skills using a variety of media communications techniques and equipment.

10.0100.80 **Media Communication - Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Media Communication** program.

### **CERTIFICATION ABBREVIATIONS FOR THE MEDIA COMMUNICATION PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

**CERTIFICATE REQUIREMENTS FOR THE MEDIA COMMUNICATION PROGRAM**

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Media Communication</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **10.0100.80**

Diversified Cooperative Education course **Media Communication, 10.0100.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.



**PROGRAM:**            **Nursing Services**

**PROGRAM**

**CIP CODE:**        **51.1600**

**DESCRIPTION:**    *The **Nursing Services** program is designed to prepare students for employment as nursing assistants and home health aides, or acceptance into an articulated nursing program at the postsecondary level. It also provides exposure to patient care for students interested in other health care careers. Nursing Assistant programs must be approved by the Arizona State Board of Nursing. Students who pass both a written test and a technical skills evaluation are then qualified to become certified as Nursing Assistants. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for employment in Nursing Services occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised clinical occupational experience, and the Career and Technical Student Organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I**                ***The following course is recommended as part of a***  
**Grades**                ***Comprehensive Career and Technical Education (CTE)***  
**7-8**                      ***Program:***

90.0000.10    ***Technological Foundations:*** All students **should** complete Level I experience or attain these competencies.

**Level II**                ***The following courses are recommended as part of a***  
**Grades**                ***Comprehensive CTE NURSING SERVICES Program:***  
**9-10**

99.0300.30    ***Applied Biological Systems-Health:*** Students **should** complete this Level II cluster or attain these competencies.

99.0500.10    ***Human Services and Technology:*** If Applied Biological Systems-Health is not available, students **may** complete this Level II cluster or attain these competencies.

## Nursing Services (continued)

Level III  
Grades  
11-12

*The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III NURSING SERVICES competencies are addressed in this instructional sequence.*

51.1600.10 **Nursing Related Services:** This course prepares students to perform routine nursing-related services to clients in hospitals or long-term care facilities under the training and supervision of a registered nurse.

*One of the following Level III courses will be included as part of the instructional sequence for this program:*

51.1600.20 **Nursing Services Applications:** This course prepares students for advanced technical skills and knowledge using a variety of Nursing Assisting techniques and equipment.

51.1600.80 **Nursing Services - Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Nursing Services** program.

**PROGRAM:** Plumbing

**PROGRAM**

**CIP CODE:** 46.0500

**DESCRIPTION:** *The **Plumbing** program is designed to prepare students to assemble, install, and repair pipes, fittings, and fixtures of heating, water, and drainage systems according to specifications and plumbing codes. Fundamentals of plumbing include the information and basic skills necessary to build from blueprints, residential, commercial, and industrial structures. In addition to technical skills, students completing this program will also develop advanced critical thinking, career development, applied academic, life management, business, economic, and leadership skills required for Plumbing occupations. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupation experience and the Career and Technical Student Organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Technological Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** *The following courses are recommended as part of a Comprehensive CTE PLUMBING Program:*

99.0200.10 **Industrial Technology:** Students should complete this Level II cluster.

99.0400.10 **Business Management Technology:** Students may complete this Level II cluster or attain these competencies. This is recommended for students who wish to emphasize the entrepreneurial aspects of this industry.

## Plumbing (continued)

Level III  
Grades  
11-12

*The following describes the recommended sequence of courses developed from industry-validated skills necessary for entry level employment or continued related education. All the Level III PLUMBING competencies are addressed in this instructional sequence.*

46.0500.10 **Plumbing Fundamentals:** This course prepares students to apply technical knowledge and skills to lay out, assemble, install, and maintain piping fixtures and piping systems for steam, hot water, heating, cooling, drainage, lubricating, sprinkling, and industrial processing systems. Instruction includes material selection and the use of tools to cut, bend, join and weld pipes.

**One of the following Level III courses will be included as part of the instructional sequence for this program:**

46.0500.20 **Plumbing Advanced Applications:** This course prepares students for advanced technical knowledge and skills using a variety of plumbing techniques and equipment.

46.0500.80 **Plumbing - Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Plumbing** Program.

### **CERTIFICATION ABBREVIATIONS FOR THE PLUMBING PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

### CERTIFICATE REQUIREMENTS FOR THE PLUMBING PROGRAM

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Plumbing</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **46.0500.80**.

Diversified Cooperative Education course **Plumbing, 46.0500.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.

**PROGRAM:** Precision Metal Workers

**PROGRAM**

**CIP CODE:** 48.0500

**DESCRIPTION:** *The **Precision Metal Workers** program is designed to prepare students for employment in jobs related to the fabrication, joining and machining of metals. Instruction provides an integrated approach for teaching skills in sheet metal, welding and machining technology. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for Precision Metal Workers occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the career and technical student organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** *The following courses are recommended as part of a Comprehensive CTE PRECISION METAL WORKERS Program:*

99.0200.10 **Industrial Technology:** Students should complete this Level II cluster or attain these competencies.

99.0400.10 **Business Management:** Students may complete this Level II cluster or attain these competencies. This is recommended for students who have an interest in sole proprietorships, management and supervisory occupations.

## Precision Metal Workers (continued)

Level III  
Grades  
11-12

*The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III PRECISION METAL WORKERS competencies are addressed in this instructional sequence.*

48.0500.10 **Fundamentals of Precision Metal Workers** program consists of an instructional sequence that prepares the individual to apply knowledge and skills in creating products using safety, precision crafting and technical illustration.

***One of the following Level III courses will be included as part of the instruction sequence for this program:***

48.0500.20 **Sheet Metal Advanced Applications:** This course prepares students for application of advanced technical knowledge and skills using a variety of sheet metal techniques and equipment.

48.0500.30 **Welding Advanced Applications:** This course prepares students for application of advanced technical knowledge and skills using a variety of welding techniques and equipment.

48.0500.40 **Machining Technology Advanced Applications:** This course prepares students for application of advanced technical knowledge and skills using a variety of machining technology techniques and equipment.

47.0500.80 **Precision Metal Workers - Cooperative Education:** This course utilizes cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Precision Metal Workers** program.



### **CERTIFICATION ABBREVIATIONS FOR THE PRECISION METAL WORKERS PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

### CERTIFICATE REQUIREMENTS FOR THE PRECISION METAL WORKERS PROGRAM

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT <i>Approval</i> VTI	Type AVT, BVT, PVT, SVT <i>Approval</i> VTT	Type AVT, BVT, PVT, SVT <i>Approval</i> VTI	Type PVI, SVI				
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT <i>Approval</i> VDE	Type AVT, BVT, SVT, PVT <i>Approval</i> VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT <i>Approval</i> VOE	Type AVT, BVT, PVT, SVT <i>Approval</i> VBS	Type PVB, SVB		
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT <i>Approval</i> VOE	Type AVT, BVT, PVT, SVT <i>Approval</i> VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT <i>Approval</i> VTT	Type AVT, BVT, PVT, SVT <i>Approval</i> VIT	Type AVT, BVT, PVT, SVT <i>Approval</i> VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Precision Metal Workers</b>	Type IA	Type AVT, BVT, PVT, SVT <i>Approval</i> VTI	Type AVT, BVT, PVT, SVT <i>Approval</i> VTT	Type AVT, BVT, PVT, SVT <i>Approval</i> VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **48.0500.80**.

Diversified Cooperative Education course **Precision Metal Workers, 48.0500.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.

**PROGRAM:** Residential Electrician

**PROGRAM**

**CIP CODE:** 46.0300

**DESCRIPTION:** *The **Residential Electrician** program is designed to prepare students to install, operate, maintain, troubleshoot, and repair residential, commercial, and industrial electrical systems. Fundamentals of the electrical trade include the information and basic skills necessary to install residential, commercial, and industrial electrical systems from blueprints. This program also contains information relating to current technology used in electrical systems. In addition to technical skills, students completing this program will also develop skills in advanced critical thinking, career development, applied academic, life management, business economic, and leadership skills required for Electrical Trades occupations. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** *The following courses are recommended as part of a Comprehensive CTE RESIDENTIAL ELECTRICIAN Program:*

99.0200.10 **Industrial Technology:** Students should complete this Level II cluster or attain these competencies.

99.0100.10 **Information Technology:** Students may complete this Level II cluster or attain these competencies. This is recommended to enhance the students' knowledge of electronics in communication industries.

## Residential Electrician (continued)

- 99.0400.10 **Business Management:** Students may complete this Level II cluster or attain these competencies. This is recommended for students who wish to emphasize the entrepreneurial aspects of this industry.

### Level III Grades 11-12

***The following describes a recommended sequence of courses developed from industry-validated skills necessary for initial level employment or continued related education. All the Level III RESIDENTIAL ELECTRICIAN competencies are addressed in this instructional program.***

- 46.0300.10 **Electrical Installation:** This course prepares students to apply technical knowledge and skills to install, operate, maintain, and repair residential, commercial, and industrial electrical systems, and the power lines that transmit electricity from its source of generation to its place of consumption.

***One of the following Level III courses will be included as part of the instructional sequence for this program:***

- 46.0300.20 **Residential Electrician Advanced Applications:** This course prepares students for application of advanced technical knowledge and skills using a variety of residential electrician techniques and equipment.
- 46.0300.80 **Residential Electrician - Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Residential Electrician** program.

### **CERTIFICATION ABBREVIATIONS FOR THE RESIDENTIAL ELECTRICIAN PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

### CERTIFICATE REQUIREMENTS FOR THE RESIDENTIAL ELECTRICIAN PROGRAM

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Residential Electrician</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **46.0300.80**.

Diversified Cooperative Education course **Residential Electrician, 46.0300.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies

**PROGRAM:** Sales and Marketing

**PROGRAM**

**CIP CODE:** 08.0700

**DESCRIPTION:** *The **Sales and Marketing** program is designed to prepare students for employment in various sales, customer service, and/or first-line supervisory positions in wholesale, retail, and service establishments. A student completing this program will possess the technical knowledge and skills associated with sales, marketing, and related activities for broad categories or products and services. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for entry into Sales and Marketing occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, DECA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** *The following courses are recommended as part of a Comprehensive CTE SALES AND MARKETING Program:*

99.0400.10 **Business Management Technology:** Students should complete this Level II cluster or attain these competencies.

99.0100.10 **Information Technology:** If Business Management Technology is not available, students may complete this Level II cluster or attain these competencies.

99.0500.10 **Human Services and Technology:** If Business Management and Technology is not available, students may complete this Level II cluster or attain these competencies.

## Sales and Marketing (continued)

Level III  
Grades  
11-12

*The following describes the recommended sequence of courses organized on the basis of industry recognized skills necessary for initial employment or continued related education. All the Level III SALES AND MARKETING competencies are addressed in this instructional sequence:*

08.0700.10 **Sales and Marketing:** This course is designed to prepare students for employment in various sales, customer service, and supervisory positions in wholesale, retail, and service areas.

*One of the following Level III courses will be included as part of the instructional sequence for this program:*

08.0700.20 **Sales and Marketing Applications:** This course is a school laboratory experience focused on project-oriented activities to build and expand knowledge and behaviors associated with all aspects of sales and services.

08.0700.30 **Marketing Entrepreneurship:** This course prepares students to perform marketing and management functions and tasks associated with creating a new business enterprise.

08.0700.40 **Retailing:** This course prepares students to sell and merchandise hard- and soft-line general merchandise in a retail setting. (This code is for courses utilizing a student-operated store.)

08.0700.50 **Marketing Management:** This course prepares students to apply marketing skills in a management position in any industry, generally at the mid-management level.

08.0700.80 **Sales and Marketing - Cooperative Education:** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Sales and Marketing** Program.



### **CERTIFICATION ABBREVIATIONS FOR THE SALES AND MARKETING PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVF Provisional Vocational Family Consumer Sciences*
- *PVH Provisional Vocational Health Occupations*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVF Standard Vocational Family Consumer Sciences*
- *SVH Standard Vocational Health Occupations*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VFC Vocational Family & Consumer Sciences*
- *VHE Vocational Home Economics*
- *VHO Vocational Health Occupations*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VRO Vocational Related Occupations*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

### CERTIFICATE REQUIREMENTS FOR THE SALES AND MARKETING PROGRAM

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Human Services Technology</b>	Type AVT, BVT, PVT, SVT Approval VHE	Type AVT, BVT, PVT, SVT Approval VRO	Type AVT, BVT, PVT, SVT Approval VFC	Type PVF, SVF	Type AVT, BVT, PVT, SVT Approval VHO	Type PVH, SVH			
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Sales and Marketing</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM					
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **08.0700.80**.

Diversified Cooperative Education course **Sales and Marketing, 08.0700.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies.

**PROGRAM:** Upholstering

**PROGRAM**

**CIP CODE:** 48.0300

**DESCRIPTION:** *The **Upholstering** program prepares students to engage in all aspects of upholstery in automobiles, aircraft interiors, recreational vehicles, and furniture. Students will also learn about non-apparel needle trade production such as awnings, athletic equipment, special safety restraints, pattern making, pattern layout, and reading plans. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for Upholstering occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**Level II  
Grades  
9-10** *The following courses are recommended as part of a Comprehensive CTE UPHOLSTERING Program:*

99.0200.10 **Industrial Technology:** Students should complete this Level II cluster or attain these competencies.

99.0400.10 **Business Management Technology:** Students may complete this Level II cluster or attain these competencies. This is recommended for students who wish to emphasize the entrepreneurial aspects of this industry.

## Upholstering (continued)

Level III  
Grades  
11-12

*The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III UPHOLSTERING competencies are addressed in this instructional sequence.*

48.0300.10 ***Upholstering Fundamentals:*** This course prepares students to apply technical knowledge and skills to install springs, filling, padding, covering and finishing on items such as furniture, automobile seats, caskets, mattresses, and bedsprings.

***One of the following Level III courses will be included as part of the instructional sequence for this program:***

48.0300.20 ***Upholstering Advanced Applications:*** This course prepares students for application of advanced technical knowledge and skills using a variety of upholstery techniques and equipment.

48.0300.80 ***Upholstering - Cooperative Education:*** This course utilizes a cooperative education methodology to combine school based and supervised work based learning experiences, directly related to the competencies identified for the ***Upholstering*** program.

### **CERTIFICATION ABBREVIATIONS FOR THE UPHOLSTERING PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

### CERTIFICATE REQUIREMENTS FOR THE UPHOLSTERING PROGRAM

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Upholstering</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **48.0300.80**.

Diversified Cooperative Education course **Upholstering, 48.0300.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies

**PROGRAM:**           **Vehicle And Mobile Equipment Technicians**

**PROGRAM**

**CIP CODE:**       **47.0600**

**DESCRIPTION:**   *The **Vehicle & Mobile Equipment Technicians** program is designed to prepare students for jobs in mechanical and collision repair of various vehicles and mobile equipment. The program can include instruction in: aviation maintenance and the service of aviation systems; technical skills to repair and service lawn and garden and light construction small engines; automotive painting; body, and collision repair; maintenance and repair of automotive electrical and electronic systems; suspension, steering, and braking systems; and the diagnosis and repair of engine performance problems; repairs of heavy duty truck systems in vehicles such as buses, ships, trucks, railroad locomotives, and construction equipment; and to make repairs of stationary diesel engines in electrical generators and related equipment. Students will use a variety of tools and testing and diagnostic equipment. In addition to technical skills, students completing this program will also develop advanced critical thinking, career development, applied academic, life management, business, economic, and leadership skills required for Vehicle & Mobile Equipment Technicians occupations. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the career & technical student organization, SkillsUSA-VICA*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I**           ***The following course is recommended as part of a***  
**Grades**       ***Comprehensive Career and Technical Education (CTE)***  
**7-8**           ***Program:***

90.0000.10   ***Technological Foundations:*** All students **should** complete Level I experience or attain these competencies.

## Vehicle and Mobile Equipment Technicians (continued)

### Level II Grades 9-10

***The following courses are recommended as part of a Comprehensive CTE VEHICLE AND MOBILE EQUIPMENT TECHNICIANS Program:***

99.0200.10 ***Industrial Technology:*** Students should complete this Level II cluster or attain these competencies.

99.0400.10 ***Business Management:*** Students may complete this Level II cluster or attain these competencies. This is recommended for students who have an interest in sole proprietorships, management and supervisory occupations.

### Level III Grades 11-12

***The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III VEHICLE AND MOBILE EQUIPMENT TECHNICIANS competencies are addressed in these instructional courses.***

47.0600.10 ***Fundamentals of Vehicle and Mobile Equipment Technicians:*** This program prepares the student to apply technical knowledge and skills in the safety, adjustment, maintenance, part replacement, and repair of tools, equipment and machines

***One of the following Level III courses will be included as part of the instructional sequence for this program:***

47.0600.20 ***Aircraft Mechanics:*** This course prepares students for application of advanced technical knowledge and skills to repair, service and maintain aircraft components.

47.0600.30 ***Air Cooled Engine Repair:*** This course prepares students for application of advanced technical knowledge and skills using a variety of Air Cooled Engine Repair techniques and equipment.

47.0600.40 ***Automotive Collision Repair:*** This course prepares students for application of advanced technical knowledge and skills using a variety of collision and damage repair techniques and equipment and is designed to meet initial Automotive Service Excellence (ASE) technician certification requirements.



### ***Vehicle and Mobile Equipment Technicians (continued)***

- 47.0600.50 ***Automotive Technology:*** This course prepares students for application of advanced technical knowledge and skills using General Automotive Mechanics, Automotive Electrical/Electronic Systems, Automotive Engine Performance, Automotive Braking Systems and Automotive Suspension and Steering Systems techniques and equipment and is designed to meet initial Automotive Service Excellence (ASE) technician certification requirements.
- 47.0600.60 ***Heavy Duty Truck Maintenance:*** This course prepares students for application of advanced technical knowledge and skills using Gasoline/Diesel Engine Mechanics, Electrical/Electronic Systems, Preventive Maintenance Inspection, Braking Systems and Suspension and Steering Systems techniques and equipment and is designed to meet initial Automotive Service Excellence (ASE) technician certification requirements.
- 47.0600.80 ***Vehicle and Mobile Equipment Mechanics - Cooperative Education:*** This course utilizes cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the ***Vehicle and Mobile Equipment*** program.

**CERTIFICATION ABBREVIATIONS FOR THE VEHICLE AND MOBILE EQUIPMENT TECHNICIANS PROGRAM**

**CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

**APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

**CERTIFICATE REQUIREMENTS FOR THE VEHICLE AND MOBILE EQUIPMENT TECHNICIANS PROGRAM**

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVB, SVB	Type PVB, SVB	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS		
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVB, SVB	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Vehicle and Mobile Equipment Technicians</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **47.0600.80**.

Diversified Cooperative Education course **Vehicle and Mobile Equipment Technicians, 47.0600.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies

**PROGRAM:** Visual Communications

**PROGRAM:**

**CIP CODE:** 50.0400

**DESCRIPTION:** *The **Visual Communications** program is designed to prepare students for employment in various graphic design, advertising, typesetting, illustration, layout and various imaging occupations. It includes instruction in developing layout, design, production art and business skills in such areas as design and illustration, art tools and media, lettering and typography, graphic design, computer-generated imaging, communication, marketing, and safety as well as technical knowledge and skills associated with electronic imaging systems, photographic composition, photographic equipment use/maintenance, and photographic processing. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic, and leadership skills required for Visual Communications occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the career and technical student organization, SkillsUSA-VICA.*

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Level I  
Grades  
7-8** *The following course is recommended as part of a Comprehensive Career and Technical Technological Education (CTE) Program:*

90.0000.10 **Technological Foundations:** All students should complete Level I experience or attain these competencies.

**LEVEL II  
Grades  
9-10** *The Following Courses Are Recommended as part of a Comprehensive CTE Visual Communications Program:*

99.0100.10 **Information Technology:** Students should complete this Level II cluster or attain these competencies.

99.0200.10 **Industrial Technology:** Students may complete this Level II cluster or attain these competencies.

## Visual Communications (continued)

Level III  
Grades  
11-12

*The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Level III VISUAL COMMUNICATIONS competencies are addressed in this instructional sequence.*

50.0400.10 **Fundamentals of Visual Communications:** This course prepares students for the creation and interpretation of works and performances that use auditory, kinesthetic and visual phenomena to express ideas and emotions in various forms subject to aesthetic criteria.

*One of the following Level III courses will be included as part of the instructional sequence for this program:*

50.0400.20 **Photo Imaging Advanced Applications:** This course prepares students for application of advanced technical knowledge and skills using a variety of photo imaging techniques and equipment.

50.0400.30 **Commercial Art Advanced Applications:** This course prepares students for application of advanced technical knowledge and skills using a variety of commercial art techniques and equipment.

50.0400.80 **Visual Communications - Cooperative Education:** This course utilizes cooperative education methodology to combine school based and supervised work based learning experiences directly related to the competencies identified for the **Visual Communications** program.

### **CERTIFICATION ABBREVIATIONS FOR THE VISUAL COMMUNICATIONS PROGRAM**

#### **CERTIFICATE TYPES:**

- *AVT Adult Vocational Education Teacher (Not eligible for Co-Op Endorsement)*
- *BVT Basic Vocational Education Teacher*
- *IA Industrial Arts*
- *PVB Provisional Vocational Business*
- *PVBM Provisional Vocational Business and Marketing*
- *PVI Provisional Vocational Industrial Technology*
- *PVM Provisional Vocational Marketing*
- *PVT Provisional Vocational Education Teacher*
- *SVB Standard Vocational Business*
- *SVBM Standard Vocational Business and Marketing*
- *SVI Standard Vocational Industrial Technology*
- *SVM Standard Vocational Marketing*
- *SVT Standard Vocational Education Teacher*

#### **APPROVAL TYPES:**

- *VBS Vocational Business*
- *VDE Vocational Distributive Education*
- *VIT Vocational Industrial and Technical Education*
- *VME Vocational Marketing Education*
- *VOE Vocational Office Education*
- *VTI Vocational Trades and Industrial Education*
- *VTT Vocational Trade and Technical Education*

**CERTIFICATE REQUIREMENTS FOR THE VISUAL COMMUNICATIONS PROGRAM**

**LEVEL I:** The instructor, or one member of the teaching team\*, must be vocationally certified. (Allows for any Vocational certification.)

**LEVEL II:** The instructor, or one member of the teaching team\*, must be vocationally certified according to the following table:

<b>Industrial Technology</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
<b>Business Management Technology</b>	Type AVT, BVT, SVT, PVT Approval VDE	Type AVT, BVT, SVT, PVT Approval VME	Type PVM, SVM	Type PVBM, SVBM	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB		
<b>Information Technology</b>	Type AVT, BVT, PVT, SVT Approval VOE	Type AVT, BVT, PVT, SVT Approval VBS	Type PVB, SVB	Type PVBM, SVBM	Type IA	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VIT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI

**LEVEL III:** The instructor must be vocationally certified according to the following table:

<b>Visual Communications</b>	Type IA	Type AVT, BVT, PVT, SVT Approval VTI	Type AVT, BVT, PVT, SVT Approval VTT	Type AVT, BVT, PVT, SVT Approval VTI	Type PVI, SVI				
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**Note:**

Teacher/Coordinator Cooperative Education (CEN) is required for **50.0400.80**.

Diversified Cooperative Education course **Visual Communications, 50.0400.70** may be a part of the sequence.

The teacher must hold a Teacher/Coordinator Cooperative Education (CEN) endorsement.

\* A team is more than one teacher. All the team members are involved in instruction and coordinate delivery of the competencies